In the claims:

1. (Currently amended) A method of screening mammalian donor tissues for predisposition to rejection, the method comprising the steps of determining the level of expression of ~~at least one endogenous telomere-binding~~ G22P1 protein in the donor tissue, and comparing the determined level to a reference level of expression <u>observed in a healthy tissue sample</u>, ~~altered~~ <u>increased</u> levels of expression in the donor tissue <u>relative to those observed in the healthy tissue sample</u> being indicative of a predisposition to rejection.

2. (Previously presented) The method of claim 1, wherein the method is carried out on a donor tissue previously removed from a donor body.

3. (Previously presented) The method of claim 1, wherein the mammalian tissue is human tissue.

4. (Previously presented) The method of claim 1 wherein the tissue is renal tissue.

5. (Withdrawn) The method of claim 1 wherein the method comprises determining the expression level at least two telomere binding proteins.

6. (Withdrawn) The method of claim 5 wherein the method comprises determining the expression level of at least three telomere binding proteins.

7. (Currently amended) The method of claim 1 wherein the <u>method further comprises determining the expression level of at least one</u> telomere binding protein ~~is~~ selected from the group comprising ~~G22P1,~~ XRCC5, HPOT1, and SIRT2~~, and their homologues or analogues~~.

4

8. (Currently amended) The method of claim 1 wherein the
method further comprises determining the expression level of a
telomere binding protein ~~is~~ selected from the group comprising
Rif1, Rif2, Rap1, SIRTs 1, 3, 4, 5, 6, 7, 8, ESTL, Est2, TLG1,
CDCL3, A26, ATM, HDAC1, hSEP1, hTEP1, HuCds1, MYC, NEK2, p21,
PIN2, TNKS, TERC, HTERT, TOP2A, TOP2B, TP53, TRF1, TRF2, and
WRN.

9. (Currently amended) The method of claim 1 wherein the
reference level of expression is determined ~~substantially~~ at
the same time as the donor tissue level of expression.

10. (Cancelled)

11. (Withdrawn) A kit for screening mammalian donor tissues
for predisposition to rejection, the kit comprising reagents
for determining the level of expression of at least one
endogenous telomere binding protein in the donor tissue.

12. (Withdrawn) The kit of claim 11, wherein the kit comprises
PCR primers for detection of MRNA encoding said telomere
binding protein or proteins.

13. (Withdrawn) The kit of claim 11 wherein said protein or
proteins is/are selected from the group comprising G22P1,
XRCC5, hPOT1, and SIRT2, or homologues and analogues thereof
wherein said kit optionally comprises PCR primers for
detection of MRNA encoding said telomere binding protein or
proteins.

14. (Withdrawn) The kit of claim 11 wherein said protein or
proteins is/are selected from the group comprising Rif1, Rif2,
Rap1, S. IRTSL, 3, 4, 5, 6, 7, 8, Est1, Est2, TLG1, CDCL3,
A26, ATM, HDAC1, hSEP1, HTEP1, HuCds1, MYC, NEK2, p21, PIN2,
TNKS, TERC, HTERT, TOP2A, TOP2B, TP53, TRF1, TRF2, and WRN

5

wherein said kit optionally comprises PCR primers for detection of MRNA encoding said telomere binding protein or proteins.

15. (Withdrawn) A method of treatment of a mammalian donor tissue to reduce the risk of rejection, the method comprising the step of treating the tissue with an agent to modulate the activity, half-life or expression level and optionally, the effective functionality of at least one endogenous telomere binding protein.

16. (Withdrawn) A method of treatment of a mammalian donor tissue to reduce the risk of rejection, the method comprising the step of treating the tissue with an agent to modulate the effective functionality of at least one endogenous telomere binding protein.

17. (Withdrawn) The method of claim 15, wherein the activity, half-life, expression level, or effective functionality of said at least one protein is enhanced.

Claims 18-19. (Cancelled)

20. (Withdrawn) The method of any of claims 15, wherein said at least one protein is selected from the group comprising G22P1, XRCC5, hPOT1, and SIRT2, and homologues or analogues thereof.

21. (Withdrawn) The method of claims 15, wherein said at least one protein is selected from the group comprising Rif1, Rif2, Rap1, SIRTSL, 3, 4, 5, 6, 7, 8, Est1, Est2, TLG1, CDCL3, A26, ATM, HDAC1, hSEP1, HTEP1, HuCds1, MYC, NEK2, p21, PIN2, TNKS, TERC, HTERT, TOP2A, TOP2B, TP53, TRF1, TRF2, and WRN.

22. (Withdrawn) The method of any of claim 15, wherein the

6

treatment of said donor tissue is performed outside the bodies of both the donor and the recipient.

23. (Canceled)

24. (Withdrawn) A non-human mammalian donor tissue in which the expression of at least one endogenous telomere binding protein has been modulated.

25. (Withdrawn) The tissue of claim 24 wherein the expression of said at least one protein has been enhanced.

26. (Withdrawn) A method of assessing tissue damage comprising detecting the accumulation of cytological markers of tissue stress.

27. (Withdrawn) The method of claim 26 wherein the markers are selected from the group comprising senescence associated beta galactosidase (SA beta gal), lipofuscin, advanced glycation end products, and iso-prostanes.

28. (Previously presented) The method of claim 2, wherein the mammalian tissue is human tissue.

29. (Previously presented) The method of claim 2 wherein the tissue is renal tissue.

30. (Withdrawn) The method of claim 4 wherein the method comprises determining the expression level at least two telomere binding proteins.

31. (Currently amended) The method of claim 4 wherein the method further comprises determining the expression level of a telomere binding protein ~~is~~ selected from the group comprising G22P1, XRCC5, HPOT1, and SIRT2~~, and their homologues or~~

7

~~analogues~~.

32. (Currently amended) The method of claim 4 wherein the <u>method further comprises determining the expression level of a</u> telomere binding protein ~~is~~ selected from the group comprising Rif1, Rif2, Rap1, SIRTs 1, 3, 4, 5, 6, 7, 8, ESTL, Est2, TLG1, CDCL3, A26, ATM, HDAC1, hSEP1, hTEP1, HuCds1, MYC, NEK2, p21, PIN2, TNKS, TERC, HTERT, TOP2A, TOP2B, TP53, TRF1, TRF2, and WRN.

Claims 33-35 (Cancelled)